

## REMARKS

Applicant respectfully requests reconsideration of the subject application as amended. In response to the Final Office Action mailed 2/11/04, Applicant is filing this amendment. Please cancel claims 1-9 and 11 and enter new claims 20-25. Accordingly, claims 20-25 are currently pending.

In the Office Action mailed 2/11/04, the Examiner rejected claims 1-9 and 11 under 35 U.S.C. §112, second paragraph, as being indefinite. Applicant has canceled those claims and submits that the new claims clearly claim the embodiments of the invention. Accordingly, Applicant respectfully requests the Examiner to withdraw the 35 U.S.C. §112, second paragraph, rejection.

The Examiner also rejected claims 1-5 and 7-9 under 35 U.S.C. §102(b) and claims 6 and 11 under 35 U.S.C. §103(a), citing Bechade (US Patent 5,789,966) for all of the rejections.

Applicant submits that the new claims distinguish over Bechade in that the claimed embodiments of the invention recite a wide multiplexer having a wide bit-width input, but in which the response of the multiplexer is achieved with minimal time delay. A direct coupling of the passgate node (first and second nodes) to an output logic gate is one feature that reduces internal gate delay.

Bechade discloses a distributed (in spatial separation) multiplexer in which buffered inverters 24 are used to optimize performance of the multiplexer of Figure 1 (Bechade at col. 4, lines 16-23). The inverters are used to buffer the output of the multiplexer to restore fast signal transition time (col. 4, lines 1-14). The claimed embodiments of the invention utilize direct coupling at the output (without an output inverter) to reduce gate delay. An inverter is not employed, since the multiplexer need not necessarily be a distributed multiplexer (as in Bechade). Accordingly, Applicant submits that the elements of the amended claims distinguish over Bechade.

Accordingly, Applicant respectfully requests the Examiner to withdraw the 35 U.S.C. §102(b) and 35 U.S.C. §103(a) rejections and allow new claims 20-25.

Since this response is being submitted within the first extension period, Applicant is submitting a petition to respond in the first month of the extension period. An extension fee payment and statement is included with this submission. However, if there are any fee shortages related to this response, please charge such fee shortages to Deposit Account No. 50-2126.

Respectfully submitted,

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